

AMENDMENTS TO THE SPECIFICATION

IN THE SPECIFICATION:

Before paragraph 0001 starting at page 1 , line 1, please insert the following:

-- This application claims priority under 35 U.S.C. §119 of Korean Application No. P2003-28643, filed May 6, 2003, the entire contents of which are hereby incorporated by reference. --

Please amend paragraph 0033 starting at page 8, line 17, as follows:

[0033] The step of perceiving an interlayer short between the first and second signal wires includes detecting the resistance of the magnetic sensor depending on a change of a current flowing in the magnetic sensor, and determining [[z]] a short of the first and second signal wire if the resistance of the magnetic sensor is larger than a designated reference value.

Please amend paragraph 0081 starting at page 16, line 3, as follows:

[0081] A method and apparatus for inspecting a flat display device according to an embodiment of the present invention inspects for bad [[of]] signal wires and pixel electrodes by using a magnetic sensor such as a GMR(a giant magneto-resistance sensor), a MR(a magneto-resistance sensor), a TMR(a tunneling magneto-resistance sensor), a fluxgate sensor or an inductive sensor. The following description will be made with respect to the GMR sensor of these

magnetic sensors. However, the invention is not restricted to the enumerated magnetic sensors, and any appropriate magnetic sensor can be used to practice the invention.

Please amend paragraph 0095 starting at page 19, line 24, as follows:

[0095] Upon inspecting for shorts on the signal wires 901 to 90n, the GNR sensor scans along the pads 921 to 92n connected to each of the signal wires 901 to 90n using a non-contacting method. FIG. 11 shows that if it is assumed that the second and the third signal wires 902 and 903 are shorted by an impurity or a pattern defect caused during the manufacturing process, the current i does not flow in the first signal wire 901 and the fourth to the N^{th} signal wires 904 to 90n, but the current i flows via a shorted point 95 (see FIG. 9) in the second and the third signal wires 902 and 903. The current i flows at this time from the third signal wire 903 to the second signal wire 902 since the high voltage V_h is applied to the odd-numbered signal wires 901, 903,..., 90n-1, and the low voltage V_l is applied to the even-numbered signal wires. The current i then flows between the second signal wire 902 and the third signal wire 903, and the induced magnetic field M causes the current i to flow in the GMR sensor 200 (see FIG. 10). On the other hand, as shown in FIG. 11, since the current i does not flow in the first signal wire 901 and the fourth to the N^{th} signal wires 904 to 90n, the magnetic field is not applied to the GMR sensor 200.

Please amend paragraph 0097 starting at page 21, line 1, as follows:

[0097] The resistance value detected by the resistance detector 52 is converted into a digital signal by a signal processing circuit 53 shown in FIG. [[13]] 12 and then is amplified before being displayed on the monitor 56 under control of a control circuit 54 and a monitor driving circuit 55. Accordingly, the inspector sees the resistance value displayed on the monitor 56 and thereby determines shorts in the second and the third signal wires 902 and 903.

Please amend paragraph 0099 starting at page 21, line 12, as follows:

[0099] FIG. [[10]] 13 shows that after the inspection process, the inspection pads 93a and 93b and the shorting wires 94a and 94b are separated from the TFT array during the scribing process. During the scribing process, the substrate is cut off along a scribing line SCRBL crossing the signal pads 96 and 97. In FIG. [[10]] 13, a reference numeral '96' is a scan signal pad connected to the scan signal wire and reference numeral '97' is a data pad connected to the data wire crossing the scan signal wires. Reference numeral '98' is an inspection data common pad for supplying a data voltage to the data wires during the inspection process. Reference numeral '99' is a device that protects against electrostatic discharge damage (hereinafter referred to as "ESD protection device"). One terminal of the ESD protection device is connected to the data wires or the scan signal wires, and the other terminal is connected to an ESD shorting line 100 to which a ground voltage GND or common voltage is supplied. When static electricity arises in the TFT array during the manufacturing process or normal driving, the ESD protection device bypasses the static electricity to the ESD

shorting line 100 to thereby protect the TFT array from the static electricity damage.